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WHAT IS CLAIMED IS:

1. A cell for use in a trawl system for generating a hydrofoil-like effect during field operations for aiding in increasing a performance characteristic thereof in a water-entrained environment, comprising first and second cell bar means offset from a central axis associated with a trawl system and having at least one interconnecting connection therebetween, each of said first and second cell bar means comprising a shaped hydrofoil means whereby in field operations as said cell is propelled through a water-entrained environment, leading and trailing edges are established for each of said shaped hydrofoil means along with separate pressure differentials that provide lift vectors relative to said central axis to increase cell performance wherein said leading edge for said first cell bar means when normalized to a receding direction relative to said central axis, reside at a right side of said first cell bar means as viewed in said receding direction and wherein said leading edge of said second cell bar means when normalized to said receding direction, reside along a left side of said second bar means as viewed.

2. The cell of Claim 1 wherein said trawl system is selected from a group comprising a trawl, first and second tow lines, frontropes and first and second bridles, and said central axis is individually associated therewith and wherein said shaped hydrofoil means of said first cell bar means includes at least first and second strands positioned along a first axis of symmetry offset from said central axis wherein at least one of which is of a left-hand, loosely wound lay relative to said receding direction and said central axis and wherein said shaped hydrofoil means of said second cell bar means includes at least third and fourth strands in which at least one of which is of a right-hand, loosely wound lay relative to said receding direction and said central axis, said first, second, third and fourth strands having a common origin at said at least one interconnecting connection.

3. The cell of Claim 2 in which said selected group of said trawl system is said trawl and said central axis is symmetrical thereof and wherein said cell performance comprises increasing trawl volume relative to said central axis by said lift vectors.

4. The cell of Claim 2 in which said selected group of said trawl system is said first and second tow lines, said central axis is central thereof and said at least one interconnecting connection thereof is at a vessel or trawler at the surface of a body of water and wherein said cell performance comprises increasing spreading distance therebetween by said lift vectors, and in shallow waters, decreasing diving vectors.

5. The cell of Claim 2 in which said selected group of said trawl system is said frontropes and said central axis is central thereof and wherein said cell performance comprises increasing volume of a trawl attached thereto by said lift vectors.

6. The cell of Claim 2 in which said selected group of said trawl system is said first and second bridles and said central axis is central thereof and wherein said cell performance comprises increasing spreading distance therebetween by said lift vectors.

7. The cell of Claim 2 wherein both said first and second strands are both of a left-hand, loosely wound lay and are constructed to wind uniformly with respect to said first axis of symmetry in said receding direction relative to said central axis and wherein said third and fourth strands are both of a right-hand, loosely wound lay and wind uniformly with respect to said second axis of symmetry in said receding direction relative to said central axis.

8. The cell of Claim 7 in which said first and second strands are each formed of synthetic or natural fibers or filaments and are each internally twisted in a left-hand lay relative to said receding direction, and in which said third and fourth strands are each

formed of synthetic or natural fibers or filaments and each are internally twisted in a right-hand lay relative to said receding direction.

9. The cell of Claim 7 in which said strands are each formed of internally braided synthetic or natural fibers or filaments.

10. The cell of Claim 2 in which said first strand is provided with an internal axis of symmetry coincident with said first axis of symmetry and is positioned in an unwound state relative thereto, said second strand being constructed to wind about said first strand in uniform fashion to provide said left-hand loosely wound lay and in which said third strand is provided with an internal axis of symmetry coincident with said second axis of symmetry and is positioned in an unwound state relative thereto, said fourth strand being constructed to wind about said third strand to provide said right-hand loosely wound lay.

11. The cell of Claim 10 in which first and third strands are each formed of synthetic or natural fibers or filaments internally braided to form same; in which said second strand is formed of synthetic or natural fibers or filaments internally twisted into a left-hand lay relative to said receding direction; and in which said fourth strand is formed of internal twisted synthetic or natural fibers having a right-hand lay relative to said receding direction.

12. The cell of Claim 10 in which each strand is formed of synthetic or natural fibers or filaments braided together to form same.

13. The cell of Claim 10 in which second and fourth strands are each formed of synthetic or natural fibers or filaments internally braided to form same; said second strand being constructed to wind about said first strand in uniform fashion to provide said left-hand loosely wound lay relative to said receding direction; said fourth strand being

constructed to wind about said third strand in uniform fashion to provide said right-hand loosely wound lay relative to said receding direction.

14. The cell of Claim 13 in which said first and third strands are each formed of internally twisted synthetic or natural fibers or filaments, said internal twist of said first strand providing a left-hand internal lay relative to said receding direction; said internal twist of said third strand providing a right-hand internal lay relative to said receding direction.

15. The cell of Claim 7 in which said first and second strands define turns in a pitch range of about 3d to 70d where d is the diameter of at least the smaller of said strands and in which said third and fourth strands define turns in a pitch range of about 3d to 70d where d is the diameter of at least the smaller of said strands.

16. The cell of Claim 10 in which said second and fourth strands define turns in a pitch range about 3d to 70d where d is the diameter thereof.

17. The cell of Claim 15 in which said pitch range is about 5d to 40d.

18. The cell of Claim 16 in which said pitch range is about 5d to 40d.

19. The cell of Claim 1 wherein said trawl system is selected from a group comprising a trawl, first and second tow lines, frontropes and first and second bridles, and said central axis is individually associated therewith and wherein said shaped hydrofoil means of said first cell bar means includes a first single strap having a cross section selected by the group comprising a rectangular cross section and a quasi-rectangular cross section and wherein said shaped hydrofoil means of said second cell bar means also includes a second single strap having a cross section selected by the group comprising a

rectangular cross section and a quasi-rectangular cross section, said first and second straps having a common origin at said at least one interconnecting connection.

20. The cell of Claim 19 in which said selected group of said trawl system is said trawl and said central axis is symmetrical thereof and wherein said cell performance comprises increasing trawl volume relative to said central axis by said lift vectors.

21. The cell of Claim 19 in which said selected group of said trawl system is said first and second tow lines and said central axis is central thereof and wherein said cell performance comprises increasing spreading distance therebetween by said lift vectors.

22. The cell of Claim 19 in which said selected group of said trawl system is said frontropes and said central axis is central thereof and wherein said cell performance comprises increasing volume of a trawl attached thereto by said lift vectors.

23. The cell of Claim 19 in which said selected group of said trawl system is said first and second bridles and said central axis is central thereof and wherein said cell performance comprises increasing spreading distance therebetween by said lift vectors.

24. The cell of Claim 19 wherein said first single strap associated with said first cell bar means is of a left-hand, loosely separated lay relative to said receding direction and wherein said second single strap associated with said second cell bar means is of a right-hand, loosely separated lay along said receding direction.

25. The cell of Claim 24 in which said first single strap associated with first cell bar means and said second single strap associated with second cell bar means define turns in a pitch range of about 3d to 70d where d is the mean width of said straps.

26. The cell of Claim 25 in which pitch range is about 5d to 40 d where d is the mean width of said straps.

27. The cell of Claim 3 wherein said first cell bar means comprises a first pair of parallel mesh bars associated with a quadratic mesh cell for use therewith and wherein said second cell bar means comprises a second pair of parallel mesh bars also associated with said mesh cell, said first and second pairs of mesh bars being connecting by a plurality of connecting intersections including said at least one interconnecting connection, said first pair of parallel mesh bars each comprising first and second strands positioned along a first axis of symmetry, at least one which being of a left-hand, loosely wound lay relative to central axis, said second pair of parallel mesh bars each comprising third and fourth strands positioned along a second axis of symmetry, at least one of which being of a right-hand, loosely wound lay relative to a said central axis whereby said leading and trailing edges for said first and second parallel mesh bars are established along with separate pressure differentials that provide said lift vectors relative to said central axis to increase volume of said trawl relative to said central axis.

28. The cell of Claim 27 wherein both said first and second strands are both of a left-hand, loosely wound lay and are constructed to wind uniformly with respect to said first axis of symmetry in said receding direction and wherein said third and fourth strands are both of a right-hand, loosely wound lay and wind uniformly with respect to said second axis of symmetry in said receding direction.

29. The cell of Claim 28 in which said first and second strands are each formed of synthetic or natural fibers or filaments and are each internally twisted in a left-hand lay relative to said receding direction, and in which said third and fourth strands are each formed of synthetic or natural fibers or filaments and each are internally twisted in a right-hand lay relative to said receding direction.

30. The cell of Claim 28 in which said strands are each itself formed of internal braided synthetic or natural fibers or filaments.

31. The cell of Claim 27 in which said first strand is provided with an internal axis of symmetry coincident with said first axis of symmetry and is positioned in an unwound state relative thereto, said second strand being constructed to wind about said first strand in uniform fashion to provide said left-hand loosely wound lay and in which said third strand is provided with an internal axis of symmetry coincident with said second axis of symmetry and is positioned in an unwound state relative thereto, said fourth strand being constructed to wind about said third strand to provide said right-hand loosely wound lay.

32. The cell of Claim 31 in which first and third strands are each formed of synthetic or natural fibers or filaments internally braided to form same; in which said second strand is formed of synthetic or natural fibers or filaments internally twisted into a left-hand lay relative to said receding direction; and in which said fourth strand is formed of internal twisted synthetic or natural fibers having a right-hand lay relative to said receding direction.

33. The cell of Claim 31 in which each strand is formed of synthetic or natural fibers or filaments braided together to form same.

34. The cell of Claim 31 in which second and fourth strands are each formed of synthetic or natural fibers or filaments internally braided to form same; said second strand being constructed to wind about said first strand in uniform fashion to provide said left-hand loosely wound lay relative to said receding direction; said fourth strand being constructed to wind about said third strand in uniform fashion to provide said right-hand loosely wound lay relative to said receding direction.

35. The cell of Claim 34 in which said first and third strands are each formed of internally twisted synthetic or natural fibers or filaments; said internal twist of said first

strand providing a right-hand internal lay relative to said receding direction; said internal twist of said third strand providing a left-hand internal lay relative to said receding direction.

36. The cell of Claim 28 in which said first and second strands define turns in a pitch range of about 3d to 70d where d is the diameter of at least the larger of said strands and in which said third and fourth strands of said second cell bar means define turns in a pitch range of about 3d to 70d where d is the diameter of at least the smaller of said strands.

37. The cell of Claim 36 in which said second and fourth strands define turns in a pitch range about 3d to 70d where d is the diameter thereof.

38. The cell of Claim 36 in which said pitch range is about 5d to 40d where d is the diameter of at least the smaller of said strands.

39. The cell of Claim 37 in which said pitch range is about 5d to 40d where d is the diameter thereof.

40. The cell of Claim 3 wherein said first cell bar means comprises a first pair of parallel mesh bars that is associated with a mesh cell for aiding in constructing said trawl and wherein said second cell bar means comprises a second pair of parallel mesh bars also associated with said mesh cell, said first and second pairs of parallel mesh bars being connecting by a plurality of connecting intersections including said at least one interconnecting connection, said first pair of parallel mesh bars each comprising a first single strap having a cross section selected by the group comprising a rectangular cross section and a quasi-rectangular cross section, said second pair of parallel mesh bars each comprising a second single strap having a cross section selected by the group comprising a rectangular cross section and a quasi-rectangular cross section whereby leading and

trailing edges for said first and second parallel mesh bars are established along with separate pressure differentials that provide lift vectors relative to said central axis to increase volume of said net, trawl or the like.

41. The cell of Claim 40 wherein said first single strap associated with said first pair of parallel mesh bars is of a left-hand, loosely separated twisting lay and wherein said second single strap associated with said second pair of parallel mesh bars is of a right-hand, loosely separated twisting lay.

42. The cell of Claim 41 in which said first and second single straps define turns in a pitch range of about 3d to 70 d, where d is the mean width of said strap.

43. The cell of Claim 42 in which said pitch range is about 5d to 40d.

44. A mesh cell used in a trawl, net or the like for generating a hydrofoil-like effect during field operations for aiding in capturing marine life in a water-entrained environment, comprising first and second pairs of mesh bars offset from a central axis having interconnecting connections, said first pair of mesh bars including first and second mesh bars oriented substantially parallel to each other, each of said first and second mesh bars being constructed of at least two strands positioned relative to a first axis of symmetry, at least one of said at least two strands being of a left-hand, loosely wound lay relative to a receding direction normalized to said central axis, said second pair of mesh bars including third and fourth mesh bars oriented substantially parallel to each other but not parallel with said first pair of mesh bars, each of said third and fourth mesh bars being constructed of at least two strands positioned relative to a second axis of symmetry, at least one of said at least two strands being of a right-hand, loosely wound lay relative to said receding direction whereby in field operations as said mesh cell is propelled through a water-entrained environment, leading and trailing edges are established for said first and

second pairs of mesh bars along with a composite pressure differential therebetween so that an outwardly extending lift vector relative to said central axis is easily and accurately generated to increase mesh cell volume.

45. The mesh cell of Claim 44 wherein said leading edge of each of said first and second mesh bars of said first pair when normalized to said receding direction, reside at a right side of each of such bars as viewed in said receding direction and wherein said leading edge of each of said third and fourth mesh bars of said second pair when normalized to said receding direction, reside along a left side thereof each as viewed.

46. The mesh cell of Claim 44 wherein said at least two strands of each of said first pair of mesh bars, include a first and a second strand both of which being of a left-hand, loosely wound twisting lay relative to said receding direction and are constructed to wind uniformly with respect to said first axis of symmetry in said receding direction therealong and wherein said at least two strands of each of said second pair of mesh bars, include a third and a fourth strand both of which being of a right-hand, loosely wound twisting lay relative to said receding direction and wind uniformly with respect to said second axis of symmetry in said receding direction.

47. The mesh cell of Claim 44 wherein said at least two strands of each of said first pair of mesh bars, include at least a first strand and a second strand, said first strand having an internal axis of symmetry coincident with said first axis of symmetry and is positioned in an unwound state relative thereto, said second strand winding about said first strand in uniform fashion to provide said left-hand loosely wound lay relative to said receding direction, and wherein said at least two strands of each of said second pair of mesh bars, include at least a third strand and a fourth strand, said third strand having an internal axis of symmetry coincident with said second axis of symmetry and is positioned in an unwound state relative thereto, said fourth strand winding about said third strand in

uniform fashion to provide said right-hand loosely wound lay relative to said receding direction.

48. The mesh cell of Claim 47 wherein said at least two strands of each of said first pair of mesh bars includes a first additional strand and wherein said at least two strands of each of said second pair of mesh bars includes a second additional strand, said first additional strand also winding about said first strand in uniform fashion in a left-hand lay relative to said receding direction, said second additional strand also winding about said third strand in uniform fashion in a right-hand lay relative to said receding direction.

49. The mesh cell of Claim 48 wherein said second strand and said first additional strand define substantially similar turns each to the other but in which said turns of one is diametrically positioned about said first strand relative to the other and wherein said fourth strand and said second additional strand define substantially similar turns each to the other but in which said turns of one is diametrically positioned about said third strand relative to the other.

50. The mesh cell of Claim 46 in which said first and second strands define turns in a pitch range of about 3d to 70d where d is the diameter of at least the smaller of said strands and in which said third and fourth strands define turns in a pitch range of about 3d to 70d where d is the diameter of at least the smaller of said strands.

51. The cell of Claim 47 in which said second and fourth strands define turns in a pitch range about 3d to 70d where d is the diameter thereof.

52. The cell of Claim 50 in which said pitch range is about 5d to 40d.

53. The cell of Claim 51 in which said pitch range is about 5d to 40d.

54. A mesh cell used in a trawl, net or the like for generating a composite pressure differential during field operations to increase mesh cell volume for aiding in capturing marine life in a water-entrained environment, comprising first and second pairs of mesh bars offset from a central axis having connecting intersections, said first pair of mesh bars comprising first and second straps oriented substantially parallel to each other, said second pair of mesh bars comprising third and fourth straps oriented substantially parallel to each other but not parallel to said first and second straps, said first, second, third and fourth straps each having a cross section selected from the group comprising a rectangular cross section and a quasi-rectangular cross section whereby in field operations as said mesh cell is propelled through a water-entrained environment, leading and trailing edges are established therefor along with a composite pressure differential therebetween so that an outwardly extending lift vector relative to said central axis is easily and accurately generated to increase mesh cell volume.

55. The mesh cell of Claim 54 wherein said leading edge of said first and second straps of said first pair when normalized to a receding direction along each strap, reside at a right side thereof as viewed in said receding direction and wherein said leading edge of said third and fourth straps of said second pair when normalized to a receding direction along each strap, reside along a left side thereof as viewed.

56. The mesh cell of Claim 55 wherein said first and second straps associated with said first pair of mesh bars are of a left-hand, loosely separated twisting lay relative to said receding direction and wherein said third and fourth straps associated with said second pair of mesh bars are of a right-hand, loosely separated twisting lay relative to said receding direction.

57. The mesh cell of Claim 56 in which said first, second, third and fourth straps of said first and second pairs of mesh bars each defines turns in a pitch range of about 3d to 70 d where d is the mean width of said straps.

58. The mesh cell of Claim 57 in which pitch range is about 5d to 40 d where d is the mean width of said straps.

59. The mesh cell of Claim 55 in which each of said first, second, third and fourth straps have a quasi-rectangular cross section include cambered long side surfaces and rounded short side surfaces in which said cambered long side surfaces are most exterior relative to said central axis.

60. The mesh cell of Claim 59 in which said each of said first, second, third and fourth straps include an internal cavity interior of said long and short side surfaces and a plurality of strands residing in said internal cavity.

61. The mesh cell of Claim 60 in said plurality of strands residing in each of said internal cavities, comprise two in number of equal diameter.

62. The mesh cell of Claim 60 in said plurality of strands residing in each of said internal cavities, comprise three in number of equal diameter.

63. A mesh cell used in a trawl, net or the like for generating a hydrofoil-like effect during field operations for aiding in capturing marine life in a water-entrained environment, comprising first and second pairs of mesh bars offset from a central axis having connecting intersections, said first pair of mesh bars including first and second mesh bars oriented substantially parallel to each other, each of said first and second mesh bars being positioned relative to a first axis of symmetry and constructed of at least two strands at least one of which being of a left-hand, loosely wound lay relative a receding direction

normalized to said central axis and defining turns in a range of 3d to 70d where d is the diameter of said at least one strand, said second pair of mesh bars including third and fourth mesh bars oriented substantially parallel to each other but not parallel with said first pair of mesh bars, each of said third and fourth mesh bars being positioned relative to a second axis of symmetry and constructed of at least two strands at least one of which being of a right-hand, loosely wound lay relative said receding direction normalized to said central axis and also defining turns in a range of 3d to 70d where d is the diameter of said at least one strand whereby in field operations as said mesh cell is propelled through a water-entrained environment, leading and trailing edges are established for said first and second pairs of mesh bars along with a composite pressure differential therebetween so that an outwardly extending lift vector relative to said central axis is easily and accurately generated to increase mesh cell volume.

64. The mesh cell of Claim 63 wherein said leading edge of each mesh bar of said first pair relative to said receding direction normalized to said central axis, reside at a right side thereof as viewed in said receding direction and wherein said leading edge of each mesh bar of said second pair when normalized to a receding direction, reside along a left side thereof as viewed.

65. The mesh cell of Claim 64 in which said two strands of each of said first and second mesh bars of said first pair, wind uniformly about said first axis of symmetry, and in which said two strands of each of said third and fourth mesh bars also both wind uniformly about said second axis of symmetry.

66. The cell of Claim 64 in which the other strand of each of said first and second mesh bars is provided with an internal axis of symmetry coincident with said first axis of symmetry and is positioned in an unwound state relative thereto, said at least one strand being constructed to wind about said other strand in uniform fashion to provide said

left-hand loosely wound lay and in which the other strand of each of said third and fourth mesh bars is provided with an internal axis of symmetry coincident with said second axis of symmetry and is positioned in an unwound state relative thereto, said at least one strand being constructed to wind about said other strand in uniform fashion to provide said right-hand loosely wound lay.

67. A mesh cell used in a trawl, net or the like for generating a composite pressure differential during field operations to increase mesh cell volume for aiding in capturing marine life in a water-entrained environment, comprising a central axis, at least three mesh bars offset from said central axis forming sides and a series of associated intersections oriented in space defining a pre-selected cross section in a common longitudinal plane also offset from said central axis, a transverse working plane normal to said longitudinal plane that passes through at least two intersections between a pair of mesh bars, each pair of mesh bars being formed of first and second mesh bars of oppositely but loosely wound strands whereby in field operations as said cell is propelled through a water-entrained environment, leading and trailing edges are established for said first and second mesh bars along with a composite pressure differential therebetween so that an outwardly extending lift vector relative to said central axis is easily and accurately generated to increase mesh cell volume.

68. The mesh cell of Claim 67 in which said strands of said first mesh bar are at least two in number in which at least one thereof is of a left-hand, loosely wound lay when view in a receding direction relative to said central axis and wherein strands of said second mesh bar are at least two in number wherein at least one thereof is of right-hand, loosely wound lay when viewed in said receding direction wherein said leading edge of said first mesh bar when normalized to said receding direction, reside at a right side of each such bar as viewed in said receding direction and wherein said leading edge of second

mesh bar of said pair when normalized to a receding direction, reside along a left side thereof as viewed.

69. The mesh cell of Claim 68 in which said at least one strand of said first and second mesh bars define turns in a pitch range of about 3d to 70d where d is the diameter of said at least one strand.

70. The mesh cell of Claim 69 in which both strands uniformly wind about each other to define said turns.

71. The mesh cell of Claim 67 in which said cross section is rectangular.

72. The mesh cell of Claim 67 in which cross section is triangular.

73. The mesh cell of Claim 67 in which cross section is hexagonal.

74. The mesh cell of Claim 67 in which said transverse working plane bisects two intersections of said mesh bars to form an imaginary base and forms a pair of half mesh cells each consisting of a pair of oppositely wound mesh bars depending from an intersection offset from said base.

75. A mesh cell used in a trawl, net or the like for generating a composite pressure differential during field operations to increase mesh cell volume for aiding in capturing marine life in a water-entrained environment, comprising a central axis, at least three mesh bars offset from said central axis forming sides and a series of associated intersections oriented in space defining a pre-selected cross section in a common longitudinal plane also offset from said central axis, a transverse working plane normal to said longitudinal plane that passes through at least two intersections between said first and second mesh bars, each mesh bar defining a single strap defining leading and trailing edges during field operations, said single strap defining said first mesh bar being twisted in a first

direction about its longitudinal axis of symmetry thereof, said single strap defining said second mesh bar being twisted a second direction opposite of said first direction about its longitudinal axis of symmetry whereby in field operations as said mesh cell is propelled through a water-entrained environment, a composite pressure differential associated with said leading and trailing edges is established for said first and second mesh bars so that an outwardly extending lift vector relative to said central axis is easily and accurately generated to increase mesh cell volume.

76. The mesh cell of Claim 75 wherein said leading edge of said first mesh bar when normalized to a receding direction relative to said central axis, reside at a right side thereof as viewed in said receding direction and wherein said leading edge of said second mesh bar mesh bar when normalized to said receding direction therealong, reside along a left side thereof as viewed.

77. The mesh cell of Claim 76 in which said first direction of twist associated with said single strap constituting said first mesh bar is of a left-hand lay as viewed in said receding direction and wherein said second direction of twist associated with said single strap comprising said second mesh bar is of a right-hand lay as viewed in said receding direction.

78. The mesh cell of Claim 77 in which said left-hand and right-hand lay directions of twist associated with said straps comprising said first and second mesh bars, respectively, define turns in a pitch range of about 3d to 70d where d is the mean width of said strap.

79. The mesh cell of Claim 78 in which said cross section is rectangular.

80. The mesh cell of Claim 78 in which cross section is triangular.

81. The mesh cell of Claim 78 in which cross section is hexagonal.

82. The mesh cell of Claim 78 in which said pitch range of said is about 5d to 40d.

83. A towline interconnecting a trawl, net or the like with a vessel at the surface of a body of water for generating a hydrofoil-like effect during field operations for aiding in increasing a performance characteristic thereof, comprising first and second cell bar means offset from a central axis and having at least one interconnecting intersection therebetween that includes a portion of a vessel at the surface of body of water, each of said first and second cell bar means comprising a shaped hydrofoil means whereby in field operations as said cell is propelled through a body of water, leading and trailing edges are established for each of said shaped hydrofoil means along with separate pressure differentials that provide lift vectors relative to said central axis to increase towline performance wherein said leading edge for said first cell bar means when normalized to a receding direction relative to said central axis, reside at a right side of said first cell bar means as viewed in said receding direction and wherein said leading edge of said second cell bar means when normalized to said receding direction, reside along a left side of said second bar means as viewed.

84. The towline of Claim 83 wherein said shaped hydrofoil means of said first cell bar means includes at least first and second strands positioned along a first axis of symmetry in which at least one strand thereof is of a left-hand, loosely wound lay relative to said receding direction and wherein said shaped hydrofoil means of said second cell bar includes at least third and fourth strands in which one strand thereof is of a right-hand, loosely wound lay relative to said receding direction.

85. The towline of Claim 84 in which said at least one strand of said first and second strands defines turns in a pitch range of about 3d to 70d where d is the diameter of said one strand.

86. The towline of Claim 85 in which pitch range is about 5d to 40 d where d is the diameter of said one strand.

87. The towline of Claim 83 wherein said shaped hydrofoil means of said first cell bar means includes a first single strap having a cross section selected by the group comprising a rectangular cross section and a quasi-rectangular cross section and wherein said shaped hydrofoil means of said second cell bar means also includes a second single strap having a cross section selected by the group comprising a rectangular cross section and a quasi-rectangular cross section.

88. The towline of Claim 87 wherein said first single strap associated with said first cell bar means is of a left-hand, loosely separated lay relative to said receding direction and wherein said second single strap associated with said second cell bar means is of a right-hand, loosely separated lay relative to said receding direction.

89. The towline of Claim 88 in which said first single strap associated with first cell bar means and said second single strap associated with second cell bar means define turns in a pitch range of about 3d to 70d where d is the mean width of said straps.

90. The towline of Claim 89 in which pitch range is about 5d to 40 d where d is the mean width of said straps.

91. Bridle line means interconnecting a towline selected from one of a port and starboard towline connected to a trawl, net or the like for generating a hydrofoil-like effect during field operations for aiding in increasing a performance characteristic thereof,

comprising first and second cell bar means offset from a central axis and defining an intersection with each other and with said selected towline at a location below the surface of a body of water, each of said first and second cell bar means comprising a shaped hydrofoil means whereby in field operations as said cell is propelled through said body of water, leading and trailing edges are established for each of said shaped hydrofoil means along with separate pressure differentials that provide lift vectors relative to said central axis to increase volume of a trawl, net or the like connect connected to said bridle line means wherein said leading edge for said first cell bar means when normalized to a receding direction relative to said central axis, reside at a right side of said first cell bar means as viewed in said receding direction and wherein said leading edge of said second cell bar means when normalized to said receding, reside along a left side of said second bar means as viewed.

92. The bridle line means of Claim 91 wherein said shaped hydrofoil means of said first cell bar means includes at least first and second strands positioned relative to a first axis of symmetry in which at least one strand thereof is of a left-hand, loosely wound lay relative to said receding direction and wherein said shaped hydrofoil means of said second cell bar includes at least third and fourth strands positioned relative to a second axis of symmetry in which at least one strand thereof is of a right-hand, loosely wound lay relative to said receding direction.

93. The bridle line means of Claim 92 in which said at least one strand of said first and second strands and of said third and fourth strands define turns in a pitch range of about 3d to 70d where d is the diameter of said one strand.

94. The bridle line means of Claim 93 in which said pitch range of about 3d to 70d applies to said first, second, third and fourth strands individually where d is the diameter of the smaller of any one strand.

95. The bridle line means of Claim 94 in which pitch range is about 5d to 40d.

96. The bridle line means of Claim 93 in which pitch range is about 5d to 40 d.

97. The bridle line means of Claim 91 wherein said shaped hydrofoil means of said first cell bar means includes a first single strap having a cross section selected by the group comprising a rectangular cross section and a quasi-rectangular cross section and wherein said shaped hydrofoil means of said second cell bar means includes a second single strap having a cross section selected by the group comprising a rectangular cross section and a quasi-rectangular cross section.

98. The bridle line means of Claim 97 wherein said first single strap associated with said first cell bar means is of a left-hand, loosely separated lay relative to said receding direction and wherein said second single strap associated with said second cell bar means is of a right-hand, loosely separated lay relative to said receding direction.

99. The bridle line means of Claim 98 in which said first single strap associated with first cell bar means and said second single strap associated with second cell bar means define turns in a pitch range of about 3d to 70d where d is the mean width of said strap.

100. The bridle line means of Claim 99 in which pitch range is about 5d to 40 d where d is the mean width of said strap.

101. Frontrope means interconnecting one or more bridle lines associated with a preselected tow line selected from one of a port and starboard towline connected to a trawl, net or the like for generating a hydrofoil-like effect during field operations for aiding in increasing a performance characteristic thereof, comprising first and second cell bar means offset from a central axis and defining an intersection with each other, said intersection being positioned at a location below the surface of a body of water, each of

said first and second cell bar means comprising a shaped hydrofoil means whereby in field operations as said cell is propelled through said body of water, leading and trailing edges are established for each of said shaped hydrofoil means along with separate pressure differentials that provide lift vectors relative to said central axis to increase volume of a trawl, net or the like connected to said breast line means wherein said leading edge for said first cell bar means when normalized to a receding direction relative to said central axis, reside at a right side of said first cell bar means as viewed in said receding direction and wherein said leading edge of said second cell bar means when normalized to said receding direction, reside along a left side of said second bar means as viewed.

102. The frontrope means of Claim 101 wherein said shaped hydrofoil means of said first cell bar means includes at least first and second strands positioned relative to a first axis of symmetry and in which at least one strand thereof is of a left-hand, loosely wound lay relative to said receding direction and wherein said shaped hydrofoil means of said second cell bar includes at least third and fourth strands positioned relative to a second axis of symmetry in which at least one strand thereof is of a right-hand, loosely wound lay relative to said receding direction.

103. The frontrope means of Claim 102 in which said at least one strand of said first and second strands and of said third and fourth strands define turns in a pitch range of about 3d to 70d where d is the diameter of said one strand.

104. The frontrope means of Claim 103 in which said pitch range of about 3d to 70d applies to said first, second, third and fourth strands individually where d is the diameter of the smaller of any strand.

105. The frontrope means of Claim 103 in which pitch range is about 5d to 40 d where d is the diameter of said one strand.

106. The frontrope means of Claim 104 in which pitch range is about 3d to 40 d where d is the diameter of the smaller of any strand.

107. The frontrope means of Claim 101 wherein said shaped hydrofoil means of said first cell bar means includes a first single strap having a cross section selected by the group comprising a rectangular cross section and a quasi-rectangular cross section and wherein said shaped hydrofoil means of said second cell bar means also includes a second single strap having a cross section selected by the group comprising a rectangular cross section and a quasi-rectangular cross section.

108. The frontrope means of Claim 107 wherein said first single strap associated with said first cell bar means is of a left-hand, loosely separated lay relative to said receding direction and wherein said second single strap associated with said second cell bar means is of a right-hand, loosely separated lay along said receding direction.

109. The frontrope means of Claim 108 in which said first single strap associated with first cell bar means and said second single strap associated with second cell bar means define turns in a pitch range of about 3d to 70d where d is the mean width of said strap.

110. The frontrope means of Claim 109 in which pitch range is about 5d to 40 d where d is the mean width of said straps.

111. A method of using a cell associated with a trawl system for generating a hydrofoil-like effect during field operations for aiding in increasing a performance characteristic thereof in a water-entrained environment, comprising the steps of:

(i) from a vessel positioned at the surface of a body of water, deploying first and second cell bar means of a trawl system below the surface of the body of water wherein a central axis offset from the first and second cell bar means is

established and the first and second cell bar means have at least one interconnecting connection therebetween,

(ii) establishing positional and directional integrity between the shaped hydrofoil means associated with each of the first and second cell bar relative to the central axis, and

(ii) propelling the shaped hydrofoil means of each of the first and second cell bar means whereby leading and trailing edges are established therefor along with separate pressure differentials that provide lift vectors relative to the central axis to increase cell performance wherein said leading edge for the first cell bar means when normalized to a receding direction relative to the central axis, always resides at a right side of the first cell bar means as viewed in the receding direction and wherein the leading edge of the second cell bar means when normalized to the same receding direction, reside along a left side thereof as viewed.

112. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a tow line selected from one of a port and starboard tow line and the at least one interconnecting connection therebetween is established at the vessel itself; in which step (ii) includes positioning first and second strands comprising the hydrofoil means of the first cell bar means so that at least one strand thereof is positioned along a first axis of symmetry offset from the central axis wherein at least one of which is of a left-hand, loosely wound twisting lay relative to a receding direction established relative to the central axis and positioning third and fourth strands comprising the said shaped hydrofoil means of said second cell bar along a second axis of symmetry so that at least one of which is of a right-hand, loosely wound twisting lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing spread between the port and starboard tow lines relative to the central axis to gain increased cell performance.

113. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a port and starboard tow line, respectively and the at least one interconnecting connection therebetween is established at the vessel itself; in which step (ii) includes positioning a first strap comprising the hydrofoil means of the first cell bar means so that the same is positioned along a first axis of symmetry offset from the central axis wherein the first strap is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis and positioning a second strap comprising the shaped hydrofoil means of the second cell bar along a second axis of symmetry wherein the second strap is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing spread between the port and starboard tow lines relative to the central axis to gain increased cell performance.

114. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a trawl, the central axis being longitudinally symmetrical of the trawl and the at least one interconnecting connection being established below the surface of the body of water; in which step (ii) includes positioning first and second strands comprising the hydrofoil means of the first cell bar means so that at least one strand thereof is positioned along a first axis of symmetry offset from the central axis wherein at least one of which is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis, as well as positioning third and fourth strands comprising the shaped hydrofoil means of said second cell bar along a second axis of symmetry so that at least one of which is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl relative the central axis by the creation of the lift vectors to gain increased cell performance.

115. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a trawl, the central axis being longitudinally symmetrical with the trawl and the at least one interconnecting connection therebetween being established below the surface of the body of water; in which step (ii) includes positioning a first strap comprising the hydrofoil means of the first cell bar means so that the same is positioned along a first axis of symmetry offset from the central axis wherein the first strap is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis as well as positioning a second strap comprising the shaped hydrofoil means of the second cell bar along a second axis of symmetry offset from the central axis wherein the second strap is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl relative to the central axis by the creation the lift vectors to gain increased cell performance.

116. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a frontrope, the central axis being longitudinally symmetrical of a trawl to which the frontrope attaches and the at least one interconnecting connection therebetween being established below the surface of the body of water; in which step (ii) includes positioning first and second strands comprising the hydrofoil means of the first cell bar means so that at least one strand thereof is positioned along a first axis of symmetry offset from the central axis wherein at least one of which is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis, as well as positioning third and fourth strands comprising the shaped hydrofoil means of said second cell bar along a second axis of symmetry so that at least one of which is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl

relative the central axis by the creation of the lift vectors due to the frontrope to gain increased cell performance.

117. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a frontrope, the central axis being longitudinally symmetrical of a trawl to which the frontrope attaches and the at least one interconnecting connection therebetween being established below the surface of the body of water; in which step (ii) includes positioning a first strap comprising the hydrofoil means of the first cell bar means so that the same is positioned along a first axis of symmetry offset from the central axis wherein the first strap is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis as well as positioning a second strap comprising the shaped hydrofoil means of the second cell bar along a second axis of symmetry offset from the central axis wherein the second strap is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl relative to the central axis by the creation the lift vectors due to the frontrope to gain increased cell performance.

118. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with one of a pair of port and starboard bridles, the central axis being longitudinally symmetrical of a trawl to which the bridles attach and the at least one interconnecting connection therebetween being established below the surface of the body of water; in which step (ii) includes positioning first and second strands comprising the hydrofoil means of the first cell bar means so that at least one strand thereof is positioned along a first axis of symmetry offset from the central axis wherein at least one of which is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis, as well as positioning third and fourth strands comprising the shaped hydrofoil means of said second cell bar along a

second axis of symmetry so that at least one of which is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl relative the central axis by the creation of the lift vectors due to the selected pair of bridles to gain increased cell performance.

119. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with one of a pair of port and starboard bridles, the central axis being longitudinally symmetrical of a trawl to which the bridles attach and the at least one interconnecting connection therebetween being established below the surface of the body of water; in which step (ii) includes positioning a first strap comprising the hydrofoil means of the first cell bar means so that the same is positioned along a first axis of symmetry offset from the central axis wherein the first strap is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis as well as positioning a second strap comprising the shaped hydrofoil means of the second cell bar along a second axis of symmetry offset from the central axis wherein the second strap is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl relative to the central axis by the creation the lift vectors due to the selected pair of bridles to gain increased cell performance.

120. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a headrope, the central axis being longitudinally symmetrical of a trawl to which the headrope attaches and the at least one interconnecting connection therebetween being established below the surface of the body of water; in which step (ii) includes positioning first and second strands comprising the hydrofoil means of the first cell bar means so that at least one strand thereof is positioned along a first axis of symmetry offset from the central axis wherein at least one of which is

of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis, as well as positioning third and fourth strands comprising the shaped hydrofoil means of said second cell bar means along a second axis of symmetry so that at least one of which is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl relative the central axis by the creation of the lift vectors due to the headrope to gain increased cell performance.

121. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a headrope, the central axis being longitudinally symmetrical of a trawl to which the headrope attaches and the at least one interconnecting connection therebetween being established below the surface of the body of water; in which step (ii) includes positioning a first strap comprising the hydrofoil means of the first cell bar means so that the same is positioned along a first axis of symmetry offset from the central axis wherein the first strap is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis as well as positioning a second strap comprising the shaped hydrofoil means of the second cell bar means along a second axis of symmetry offset from the central axis wherein the second strap is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl relative to the central axis by the creation the lift vectors due to the headrope to gain increased cell performance.

122. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a footrope, the central axis being longitudinally symmetrical of a trawl to which the footrope attaches and the at least one interconnecting connection therebetween being established below the surface of the body

of water; in which step (ii) includes positioning first and second strands comprising the hydrofoil means of the first cell bar means so that at least one strand thereof is positioned along a first axis of symmetry offset from the central axis wherein at least one of which is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis, as well as positioning third and fourth strands comprising the shaped hydrofoil means of said second cell bar means along a second axis of symmetry so that at least one of which is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl relative the central axis by the creation of the lift vectors due to the footrope to gain increased cell performance.

123. The method of Claim 111 in which step (i) being further characterized by the first and second cell bar means being associated with a footrope, the central axis being longitudinally symmetrical of a trawl to which the footrope attaches and the at least one interconnecting connection therebetween being established below the surface of the body of water; in which step (ii) includes positioning a first strap comprising the hydrofoil means of the first cell bar means so that the same is positioned along a first axis of symmetry offset from the central axis wherein the first strap is of a left-hand, loosely wound lay relative to a receding direction established relative to the central axis as well as positioning a second strap comprising the shaped hydrofoil means of the second cell bar means along a second axis of symmetry offset from the central axis wherein the second strap is of a right-hand, loosely wound lay relative to the receding direction and the central axis; and in which step (iii) includes the substep of increasing volume of the trawl relative to the central axis by the creation the lift vectors due to the footrope to gain increased cell performance.